

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Sreenivas Kesaraju

GENERAL INFORMATION:

Name: Catlettsburg Refining, L.L.C.  
Address: Catlettsburg, KY 41129  
Date application received: March 31, 2004  
SIC/Source description: 2911/Petroleum Refining  
EIS #: 21-019-00004  
Application log number: 56367  
Permit number: VF-04-001

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
<input type="checkbox"/> Administrative	<input checked="" type="checkbox"/> Title V
<input type="checkbox"/> Minor	<input checked="" type="checkbox"/> Synthetic minor
<input checked="" type="checkbox"/> Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS
<input checked="" type="checkbox"/> SIP	<input type="checkbox"/> PSD
<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Netted out of PSD/NSR	
<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

☐ Acid rain source  
☐ Source subject to 112(r)  
☒ Source applied for federally enforceable emissions cap  
☐ Source provided terms for alternative operating scenarios  
☒ Source subject to a MACT standard  
☐ Source requested case-by-case 112(g) or (j) determination  
☐ Application proposes new control technology  
☒ Certified by responsible official  
☒ Diagrams or drawings included  
☐ Confidential business information (CBI) submitted in application  
☐ Pollution Prevention Measures  
☒ Area is non-attainment (list pollutants): Ozone, SO<sub>2</sub>

#### EMISSIONS SUMMARY:

The emissions increase from the Kerosene Desulfurization unit installation is as follows:

Pollutant	Potential (tpy)	Actual (tpy)
PM	2.3	2.3
PM10	2.3	2.3
SO <sub>2</sub>	8.3	8.3
NO <sub>x</sub>	32.4	32.4
CO	25.8	25.8
VOC	21.9	21.9

#### SOURCE PROCESS DESCRIPTION:

The site of the proposed project is the petroleum refinery operated by Catlettsburg Refining, LLC, a subsidiary of Marathon Ashland Petroleum LLC. This refinery is located on the Big Sandy River in Catlettsburg, Boyd County, Kentucky.

The Kerosene Desulfurizer (KDS) project involves installation of a new KDS Unit (Unit No. 2-122). This unit will have a nominal capacity of 25,000 barrels per day and will utilize a fixed-bed hydrotreating process to process blended kerosene down to a maximum product sulfur content of 10 parts per million (ppm).

#### EMISSION AND OPERATING CAPS DESCRIPTION:

To preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, and 401 KAR 51:052, Nonattainment New Source Review, Catlettsburg Refining has requested that the net emissions increases from the KDS charge heater be limited to the following:

PM	1.8 TPY
PM10	1.8 TPY
SO <sub>2</sub>	6.3 TPY
NO <sub>x</sub>	11.7 TPY
CO	19.6 TPY
VOC	1.3 TPY